State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

CITY OF INDIANAPOLIS
Southeastern Ave. Corridor Sanitary Sewer Installation Phase 2
DPW# BL-33-53 A-C; PER 5A-A Addendum #1

DATE: December 22, 2008

COMMENTS MUST BE SUBMITTED BY: January 21, 2009

I. INTRODUCTION

The above entity has applied to the State Revolving Fund Loan Program (SRF) for a loan to finance all or part of the wastewater project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the deadline date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

Max Henschen
Senior Environmental Manager
State Revolving Fund -- IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-232-8623

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **Southeastern Ave. Corridor Sanitary Sewer Installation**
DPW # BL-33- 053; PER 5A-A Addendum #1
City of Indianapolis Dept. of Public Works
2460 City-County Building
200 East Washington Street
Indianapolis, Indiana 46204

Authorized Representative: David Sherman, Director
Department of Public Works

Background: This project was originally addressed in an Environmental Assessment/Finding of No Significant Impact (EA/FNSI) distributed for a 30-day comment period to the public and environmental review authorities on April 28, 2006. Since that time, the city has redesigned the project, and some proposed sewer lines have been deleted from the project and others have been added; five lift stations have been deleted. The added, deleted and unchanged proposed sewer lines are shown on the attached graphics. As part of the State Revolving Fund Loan Program's (SRF) review process, the SRF is reissuing the EA/FNSI for another 30-day comment period; this EA/FNSI describes the revised project.

II. PROJECT LOCATION

The project planning area is bounded on the northwest by Lick Creek, on the west by Emerson Avenue, on the southwest by Connection Avenue, on the south by Troy Avenue, and by I-465 on the east. See Exhibit 1A.

III. PROJECT NEED AND PURPOSE

Homes in the project area use on-site wastewater disposal systems. The age of many of the septic systems exceeds the average lifespan of a septic system in good soil. Soils in the area are rated as moderate to severe for septic systems due to slow percolation and wetness. And there is a need for sewers in the area due to increased development as a result of the recently reconstructed interchange at Southeastern Avenue and I-465.

The Marion County Health Department, in correspondence dated January 31, 2000, stated its support of sanitary sewer installation in this area due to health hazards associated with open sewage in populated areas and unsuitable soil conditions.

IV. PROJECT DESCRIPTION

The selected plan is to install approximately 50,571 feet of 8-inch gravity sanitary sewers (100 feet by jack and bore), 4,876 feet of 10-inch sewers, 3,500 feet of 12-inch sewers, 10,635 feet of 15-inch sewers, 4,675 feet of 18-inch sewers and 667 feet of 21-inch sewers (187 feet by jack and bore). In addition, the project will install approximately 1,915 feet of 6-inch force main, 17,836 feet of 6-inch laterals, 221 manholes, 16 drop manholes, 760 wyes, and 380 drive-pipe replacements. The proposed project will eliminate approximately 676 on-site septic systems.

V. ESTIMATED PROJECT COSTS AND FUNDING

The total project cost is estimated to be $30,770,900. Costs ineligible for SRF reimbursement are related to land/easement acquisition and total approximately $137,000. Indianapolis has closed Loan #11 with the SRF which included funding for this project. The loan is for a 20-year term at a 4.4% annual interest rate. The city has and will continue to adjust its rates and charges to pay for the projects and debt service. Property owners will be charged a $2,500 connection fee. Property owners will be responsible for pumping and abandoning their septic systems in accordance with the Indiana Department of Health guidelines.

VI. EVALUATION OF ALTERNATIVES

A. No action: The no action alternative would continue the use of septic systems for wastewater disposal. Continued use of these systems will contribute to environmental degradation. Therefore, this option was rejected.

B. Optimize the Existing On-Site Systems: Optimizing the on-site systems consists of upgrading the septic systems to maximize performance. Typically, this is an unreliable alternative. Upgrade would involve making major improvements to the on-site systems. In some cases, the existing septic tanks and soil absorption fields were not installed on lots large enough to properly operate this type of system. Other characteristics such as poor drainage, insufficient set backs, soil conditions and high ground water levels make optimization efforts difficult, if not impossible. This option is not practical or environmentally sound and was rejected

C. Installation of Sanitary Sewers: Sanitary sewer installation is the selected alternative. From a maintenance and environmental perspective, the city prefers to install gravity lines wherever feasible. The topography will allow conventional gravity lines to be used, which were the only type of sanitary sewer considered.

The sewers would be sized to handle the flow from existing users, as well as future users from nearby currently undeveloped areas.

VII. Environmental Impacts of the Feasible Alternatives

A. Direct Impacts of Construction and Operation

Archaeological Resources: Some of the sewer lines will be sited off-road on land which may not have been significantly disturbed by previous construction activity (Figure 3A). An archaeological survey of such land found no archaeological material.

Structural Resources: A few lines will be installed in the Lick Creek Historic District off Southeastern Ave. northwest of Raymond St. The project will not affect that District or any other historic District or properties. The SRF's Finding, pursuant to Section 106 of the National Historic Preservation Act is: "*no historic properties affected.*"

Biota: Some lines will be installed in or near wooded areas and some will be installed in open fields. Trench widths in these areas will vary from four to ten feet depending on the depth of the sewers.

Surface Waters (Exhibit 2A): The city's PER notes that there are nine stream crossings. These will likely be open cut; directional drilling can be used only for pressurized sewer lines. The project will not adversely affect Exceptional Use streams, Outstanding State Resource waters or Natural and Scenic Recreational Rivers and Streams.

Wetlands (Exhibit 2A): The project will not affect wetlands.

100-Year Floodplain (Exhibit 2A): Parts of the collection system, but no above-ground structures, will be installed in the 100-yard floodplain.

Groundwater: The depth of seasonal high groundwater varies from 1 to 6 feet in the project area. Sewer installation will not affect the water table. The project will not impact a drinking water supply or a sole source aquifer.

Air Quality: Construction activities may generate some noise, fumes and dust. The dust, fumes and noise are short-term impacts. Construction activities should not impact ozone or airborne pollutants.

Prime Farmland: The project will not affect prime farmland.

Open Space and Recreational Opportunities: The project will neither create nor destroy open space and recreational opportunities.

The project will not affect the Lake Michigan Coastal Zone or National Natural Landmarks.

B. Secondary Impacts

The city's Preliminary Engineering Report (PER) states: "*The City will ensure through the authority of its Council, planning commission, or other means that future*

development, as well as future collection system or treatment works projects connecting to SRF funded facilities will not adversely impact wetlands, archaeological/historical/ structural resources, or other sensitive environmental resources. The City will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities."

C. Comments from Environmental Review Authorities

The Natural Resources Conservation Service, in correspondence dated July 30, 2004, stated: *The proposed improvements will not cause a conversion of prime farmland.*

The IDNR Division of Historic Preservation and Archaeology, in correspondence dated August 15, 2007, stated: *...we concur with the recommendations that no currently known archaeological resources eligible for inclusion in the National Register of Historic Places have been recorded within this portion of the proposed project area...Therefore, no further archaeological investigations are necessary for this portion of the project area. If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two business days....Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations....*(B)*ased upon the information provided to our office, we do not believe that there will be any alterations to the characteristics of the above identified historic structures qualifying them for inclusion in or eligibility for the National Register (see 36 C.F.R.§8--.16[i]).*

In correspondence dated September 28, 2006, the IDNR Environmental Unit (EU) stated: *This proposal may require the formal approval of our agency pursuant to the Flood Control Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile....The Natural Heritage Program's data have been checked. To date, no plan or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. Fish, wildlife, and botanical resources losses as a result of this project should be minimal.*

The U.S. Fish and Wildlife Service, in correspondence dated May 8, 2006, stated: *For the Southeastern Avenue project we recommend the following measures to minimize physical impacts on streams and aquatic habitat:*

> *1. Maintain a vegetated buffer between construction and streams, except at stream crossings. The buffer should be at least 25 feet wide. Where maintenance of an adequate buffer is not possible because of other physical constraints, locate the sewer line to minimize clearing of wood riparian vegetation and destabilization of stream banks.*
>
> *2. Minimize erosion and cover or contain soil piles to prevent runoff to streams during construction. Stabilize disturbed stream banks as quickly as possible after construction is completed. Revegetate with native plant species in areas that are currently dominated by natural vegetation.*

3. For stream crossings, attach the pipeline to existing bridges or use directional drilling wherever possible, rather than using an excavated crossing.

4. When excavated crossings of perennial streams or other good quality streams are unavoidable, avoid areas of high-quality aquatic habitats, such as gravel/rock riffles.

5. For excavated crossings of Lick creek, avoid disturbance within the stream channel during the fish spawning season (April 1 – June 30).

The proposed project is with the range of the federally endangered Indiana bat (Myotis sodalis) *and federally threatened bald eagle* (Haliaeetus leucocephalus). *The proposed project is not likely to adversely affect these listed species.*

...if project plans are changed significantly, please contact our office for further consultation.

The IDNR EU has not yet responded to the SRF's November 13, 2008 request for comment on the revised project. The U.S. Fish and Wildlife Service provided comments in correspondence dated December 10, 2008. In that correspondence, the Service referred to the project areas shown in Exhibit 3A; these off road areas were potentially not disturbed by previous construction activity and are characterized by woods, scrub/brush or farmed or grassy areas. In their latest comments, the Service stated: *The FWS reviewed this project previously in our letter of May 8, 2006. We submitted a list of mitigation recommendations to minimize impacts. Since then the project has been redesigned by eliminating some previously proposed segments of new sewer line routes and substituting other route segments to achieve connectivity. Specifically, there have been 10 new sewer line segments added to replace 5 segments that were eliminated. The most significant change in terms of wildlife habitat impacts is at Area #9, where a new sewer line would cross Lick Creek. The previously proposed stream crossing would have been in a developed area adjacent to Southeastern Avenue, but the redesigned crossing in Area #9 would be in an undisturbed stream reach with a wide riparian forested buffer. Another modification of concern is in Areas #4 and 5, where a new segment would pass through the edge of a riparian woodlot, parallel and in close proximity to the Shop Creek stream corridor, and cross both Lick Creek and its tributary (Rail Creek) in areas with moderately wide riparian corridors. Previously, no stream crossings were proposed in the area. Other new impacts would occur at Areas 2, 6 and 8, where the sewer lines would overlap the edge of small woodlots.*

The recommendations in our previous letter are still appropriate for the revised project. In addition we recommend that the north Lick Creek crossing be shifted back to the Southeastern Avenue corridor to avoid the excessive riparian impacts that will occur in Area #9. We also recommend that the central portion of the pipeline route in Area #5 be shifted southward to avoid disturbance of the riparian zone along Shop Creek. At the crossings of Rail Creek and Lick Creek, if directional drilling cannot be used the pipeline corridor should be designed with the minimum possible width in the riparian zones, and all disturbed soils in riparian zones should be revegetated with native plant species.

The proposed project is within the range of the federally endangered Indiana bat (Myotis sodalis). *While some foraging habitat may exist in the project area, we concur that the proposed project is not likely to adversely affect this listed species....If, however, new information on endangered species at the site becomes available or if project plans are changed significantly, please contact our office for further consultation.*

VIII. MITIGATION MEASURES

The city's PER states: *Siltation and erosion will be kept to a minimum. Any mitigation measures cited in comment letters or mandated by authorized reviewing agencies to reduce or eliminate siltation, erosion and waterway contamination will be implemented. Mitigative measures to limit erosion and siltation will include the following:*

a. *Erosion and sediment control measures required by the project specifications will require that the contractor provide a schedule for clearing, grading, excavating, and restoring disturbed areas, along with a description of measures to be used during construction to ensure erosion/sediment control. The program shall meet all applicable federal, state, and local requirements.*

b. *Natural vegetation will be retained wherever feasible.*

c. *Appropriate agronomic practices (sediment basins, seeding, mulching) will be provided to control runoff, including shoreline and stream crossings, if applicable.*

d. *Drainage systems, including surface and subsurface drainage, will be returned to their natural state as soon as possible, if disturbed.*

e. *When possible, construction activities will be scheduled to avoid excessively wet conditions.*

f. *No more than 100 feet of open trench will be allowed. Where possible, excavated material will be kept to the upland side of the trench. Excess material will be used elsewhere on the project.*

g. *The existing topsoil will be reused during the restoration process.*

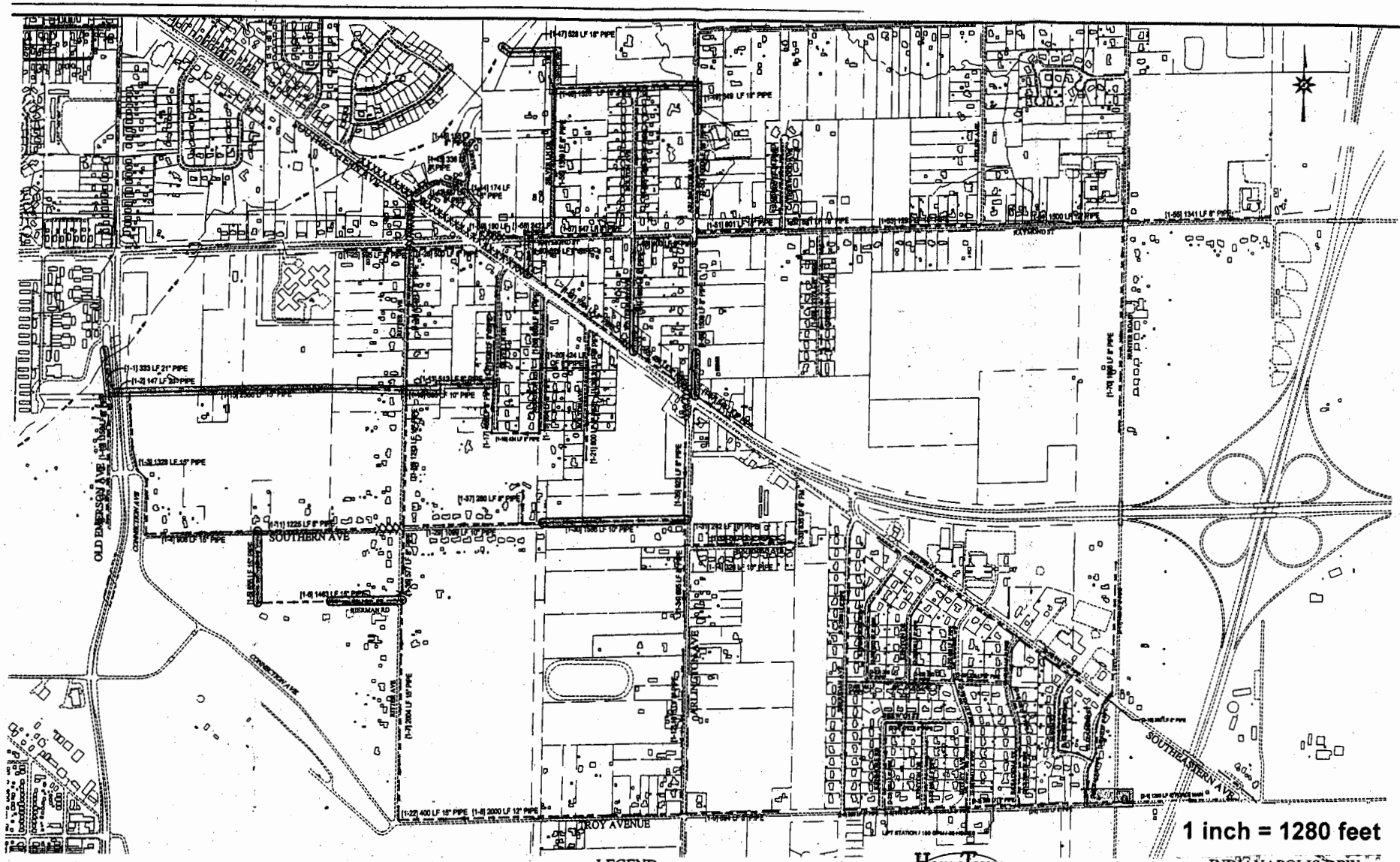
h. *If necessary, discharge from dewatering may be directed to sedimentation basins prior to discharging into surrounding surface waters.*

The project will be implemented to minimize impact to non-endangered species and their habitat. Mitigation measures cited in comment letters from the Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

The adverse impacts caused by dust may be alleviated by periodically wetting the exposed soil and unpaved roadways to reduce the suspension of particles. To reduce noise impacts, work activities can be limited to normal daytime hours.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on June 8, 2005 at 2.30 PM in the Public Assembly Room of the City County Building to discuss the project treated in the April 28, 2006 EA/FNSI. No negative comments on this project were voiced at the public hearing, although one speaker suggested that Combined Sewer Overflows and septic problems in the city be funded "as a joint effort"; no written comments were submitted in the ten days following the hearing.



LEGEND

PROPOSED - ORIGINAL

PROPOSED - REVISED

XX PROPOSED - DELETED

HomeTown ENGINEERING, LLC
3417 SHERMAN DR. STE. B
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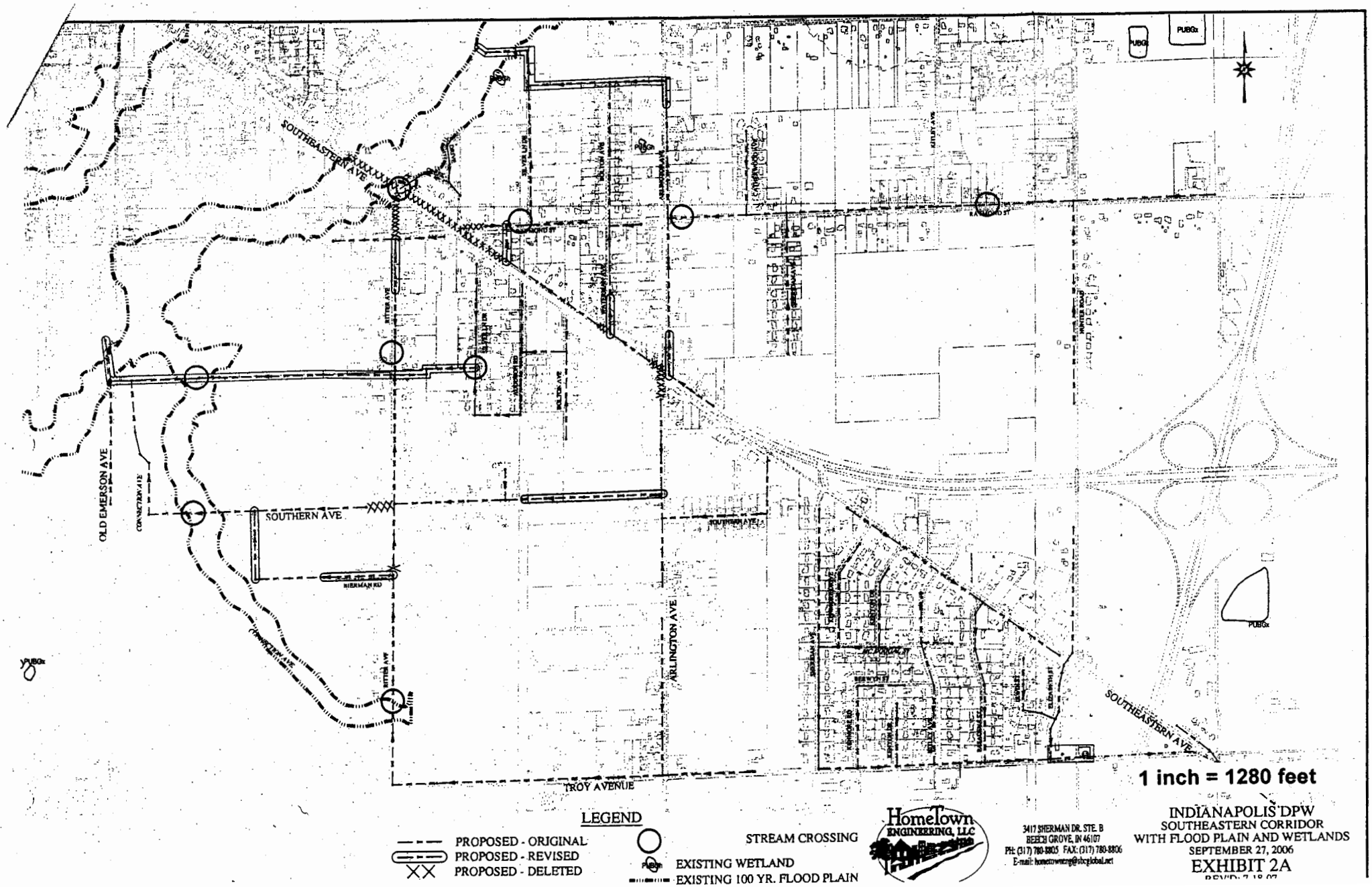
INDIANAPOLIS DPW
SOUTHEASTERN CORRIDOR
PROPOSED REVISIONS
SEPTEMBER 27, 2006
EXHIBIT 1A
REV'D: 10-23-07



LEGEND

PROPOSED - ORIGINAL
PROPOSED - REVISED
PROPOSED - DELETED

STREAM CROSSING
EXISTING WETLAND
EXISTING 100 YR. FLOOD PLAIN

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INDIANAPOLIS DPW
SOUTHEASTERN CORRIDOR
WITH FLOOD PLAIN AND WETLANDS
SEPTEMBER 27, 2006
EXHIBIT 2A
REVID: 7-18-07

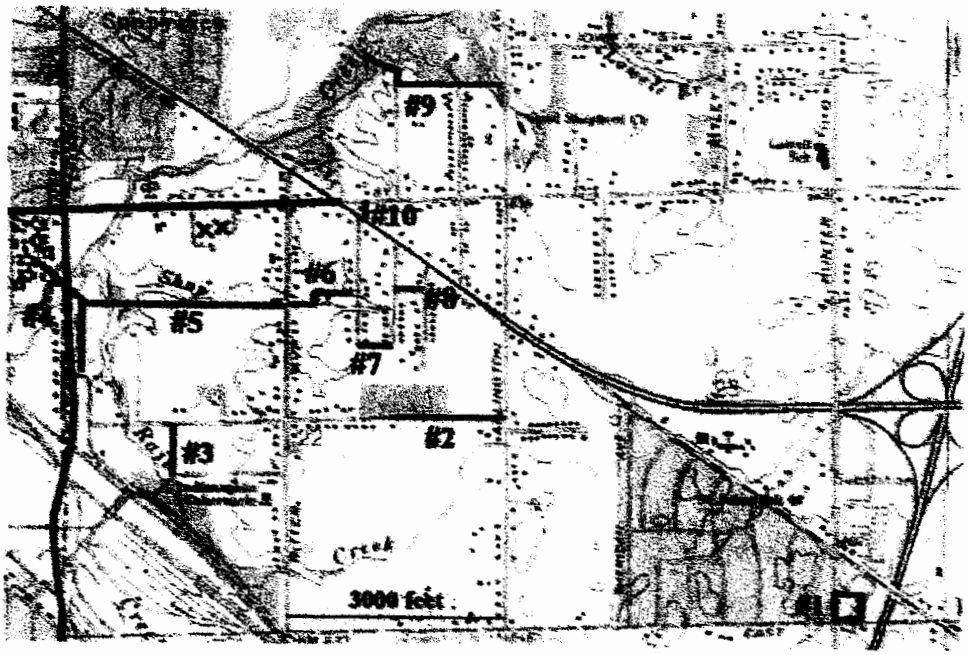

EXHIBIT 3A: Off-road areas to be affected by project construction. A lift station originally planned for Area #1 has been dropped from the project.